SUMMARY

S.1 Introduction

This Final Supplemental Environmental Document (FSED) to the Final Environmental Document (FED), Pacific Herring Commercial Fishing Regulations, 1998, provides the review and analysis required by California Environmental Quality Act (CEQA) Guidelines. The review and analysis was done to assist the California Fish and Game Commission (Commission) in regulating the commercial harvest of Pacific herring throughout the State's ocean and estuarine waters. Specifically, the FSED reviews and evaluates proposed regulatory changes for the 2005-06 fishing season, supplementing, and in some cases replacing, aspects of the proposed project described in the 1998 FED and the Final Supplemental Environmental documents of 1999, 2000, 2001, 2002, and 2004. A Notice of Preparation (NOP) and public scoping meetings were used to identify and incorporate concerns and recommendations of the public, resource and regulatory agencies, and the fishing industry into the review and analysis of the proposed changes contained in these documents.

The FSED includes seven chapters. Chapter 1 discusses the authorities and responsibilities under which the FSED was developed and describes its intended use. Chapter 2 describes the proposed project and alternatives and options for regulating the commercial harvest of herring. Chapter 3 describes the existing environment where the California herring fisheries occur. Chapter 4 addresses the impacts of the proposed project and cumulative effects. Chapter 5 describes the impacts of the alternatives to the proposed project. Chapter 6 identifies consultations with other agencies, professionals, and the public. Chapter 7 identifies the comment letters received during the public comment period and the Department's responses to those comments. Appendix F, Summary of Changes, was added to illustrate what changes were made to the DSED in order to finalize the supplemental document. References used throughout this FSED are listed in the Literature Cited section.

The proposed project has been selected as the preferred alternative based on the analysis of this FSED. The proposed project is identified as the preferred alternative because it provides a set of regulations most likely to achieve the State's CEQA policy with respect to the conservation, sustainability, maintenance, and utilization of the Pacific herring resource.

S.2 Proposed Project

The proposed project is a body of proposed regulations governing the commercial harvest of herring-for-roe products, the harvest of herring eggs-on-kelp, and the harvest of herring as fresh fish, for bait, and pet food. The proposed project takes the form of recommendations for continuation, amendment, or change to an existing body of regulations in effect since November 1, 2004 (sections 163, 163.5, and 164, Title 14, California Code of Regulations [CCR]).

The proposed regulatory changes will establish fishing quotas for San Francisco and Tomales bays for the 2005-06 herring fishing season, based on the most recent assessments of the spawning populations in these locations. Previously established quotas for Humboldt Bay and Crescent City Harbor fisheries are not affected by these regulatory changes. The proposed changes addressed in this document also include provisions for the continued experimental use of 2-inch mesh size nets used in the roe herring fishery in Tomales Bay for the 2005-06 season only, and possible weekend fishing in Tomales Bay. Other changes, such as the reduction of the minimum mesh size to 2-in. in San Francisco Bay as proposed by industry members, a reduction of the transfer fee.

The authorization of permit holders in San Francisco Bay to hold permits in more than one platoon, the elimination of the point system and establishment of new eligibility criteria for permit transfer, the specification of the documents needed to demonstrate eligibility, the elimination of the requirements that a permit holder mail a notice of intention to transfer to everyone on the Department’s list of individuals with experience points (commonly called the 20-point list), the specification of the requirements for requesting a permit transfer, and provide a process to appeal a

Department denial of a transfer changes, will be considered for adoption by the Commission at their November 4, 2005 meeting (Section 2.3.1.7.2 of this FSED), and minor editorial changes recommended to improve the clarity of the regulations, to provide for the efficient harvest and orderly conduct of the fishery, and for the protection of the resource.

The specific regulatory changes proposed for the 2005-06 season will: (1) provide for a 5,890-ton quota, Option 1, for San Francisco Bay (10 percent of the 58,900-ton estimated spawning biomass for the 2004-05 season), or a quota of 4,502-tons, Option 2, should the Commission choose to adopt a minimum mesh size of 2 inches (2) provide an initial 400-ton fishing quota in Tomales Bay (11 percent of the 2003-04 estimated spawning biomass of 3,686 tons) for Tomales Bay with provisions to increase the quota in season if escapement goals are achieved by February 15, 2006; (3) set the dates of the roe herring fisheries in San Francisco Bay from 5:00 p.m. on December 11, 2005 until 6:00 a.m. on December 23, 2005, and 5:00 p.m. on December 26 until 6:00 a.m. December 30 ("DH" gill net platoon only), and 5:00 p.m. on January 2, 2006 until noon on March 17, 2006; (4) set the dates of the roe herring fishery in Tomales Bay from 5:00 p.m. on Sunday, December 25, 2005 until noon on Friday, December 30, 2005, and from 5:00 p.m. on Sunday, January 1, 2006 to noon on Friday, February 24, 2006; (5) provide for the Tomales Bay fishery a one-year continuation of a mesh size of no less than 2 inches or greater than 2 ½ inches, for the 2005-06 season only; and (6) specify that the length measurement of a gillnet will be at the corkline.

S.3 Project Alternatives

Three alternatives are considered in this FSED. These alternatives include: (1) a no-fishery alternative; (2) a no change alternative which uses existing regulations established; and (3) establishing individual vessel quotas for gill net vessels in the roe herring fishery. Refer to Section 2.4, Project Alternatives, and Chapter 5 of this FESD, and Chapter 6 of the 1998 FED, Analysis of Alternatives, for a thorough description of alternatives and analysis of their impacts.

S.4 Existing Environment

The environments most likely to be affected by the regulatory revisions outlined in this FSED are San Francisco Bay and Tomales Bay. Although the proposed project consists primarily of regulatory changes for San Francisco Bay and Tomales Bay fisheries, the existing environment potentially affected by the proposed project and alternatives also includes the open ocean and other bays in which herring occur. Herring fisheries also occur in the Crescent City Harbor area, Humboldt Bay, and the open ocean, primarily within Monterey Bay. Refer to Section 3.3 of the FED, Specific Biological and Environmental Descriptions, for a thorough description of these environments and Chapter 3 of this document for a description of the environmental setting for these areas.

S.5 Environmental Impacts

S.5.1 Proposed Project

An analysis of the potential impacts of the proposed project described by this FSED identified the possible effects of reducing the minimum mesh size to 2-in. in the San Francisco Bay fishery. This potential impact was not identified in the FED. However, several areas of potential concern were identified in the FED. The FED identified the area with the highest potential for adverse impacts associated with the proposed regulatory changes as the San Francisco Bay area, which supports the largest roe herring fishery in the State. The following localized, short-term, and less than significant impacts were identified in the FED for several areas of potential concern including: (1) boat and vehicle traffic circulation; (2) water and air quality; (3) housing and utilities; (4) geology, scenic quality, recreation; and (5) noise. The FED found biological impacts to have the greatest potential for significant environmental impact, but found these impacts to be localized, short-term, and less than significant, with mitigation provided by the current management strategy and Department conducted herring population monitoring. Refer to Chapter 4 of the FED for a thorough environmental impact analysis of the proposed project. Any adverse

impacts associated with the regulatory changes proposed by this FSED are addressed within this document.

S.5.2 Alternatives

The alternatives proposed in this FSED are the same as those described in the FED. A thorough analysis of the impacts of these alternatives is provided in Chapter 6 of the FED. A summary of impacts associated with these alternatives is provided below.

Alternative 1 (no fishery)

Localized, short-term, and less than significant impacts to vessel and vehicle traffic circulation, water quality, air quality, housing and utilities, scenic quality, recreational opportunities, and noise levels identified for the proposed project would be eliminated or redistributed in an unpredictable manner.

Potential biological impacts associated with a no fishery alternative include an increased rate of natural mortality, the potential for deterioration in the condition of the herring population as it reaches carrying capacity, and potential impacts to other species that compete with herring for food resources. Although this would be a natural process, adverse temporary impacts would nonetheless be associated with this alternative.

Alternative 2 (no change)

In most regards, the environmental impacts associated with this alternative would be comparable to those of the proposed project. Although this alternative does provide for an adjustment of quotas and season dates, it does not address certain fishery-related problems considered in amendments or changes to existing regulations. The existing regulation alternative would maintain the herring fishery regulations as amended through 2005 and would not provide for the consistent adaptive management of the State's resources.

Alternative 3 (individual vessel quota)

As addressed in detail within the FED, individual vessel quotas, rather than the platoon-based quota system currently used in the roe herring gill net fishery,

could potentially increase impacts due to an increase in the number of days fished. However, these impacts are still expected to be short-term, localized, and less than significant for most environmental categories.

Wastage of resource could result from sorting catches to remove males from the catch or discarding unripe fish to achieve higher roe content, and therefore, higher ex-vessel prices. However, the competition between permittees for a share of the quota is greatly lessened under an individual quota system and may result in fewer nets likely to be lost, thus reducing impacts from "ghost" net fishing as explained in Section 4.2.6.1 of the FED.

S.5.3 Cumulative

An analysis of the cumulative impacts of the proposed project revealed no additional impacts to those addressed in the FED. The proposed regulatory changes addressed by this FSED are for an existing ongoing project. Potential impacts of reducing the minimum mesh size are discussed in section 2.3.1.5 of this FSED. An analysis of cumulative impacts is provided in Chapter 5 of the FED.

A variety of factors have the capacity to influence Pacific herring population status in California in addition to the proposed project including: (1) biological events; (2) competitive interactions with other pelagic fish and fisheries; (3) oceanographic events; (4) habitat loss; and (5) water quality. However, as with potential impacts from the on-going commercial harvest of herring, continued monitoring of the herring resource and oceanographic conditions should help identify any trends that would signal that the stock's reproductive potential is in jeopardy.

S.6 Areas of Controversy

The following areas of controversy have been identified regarding commercial herring fishing in prior years. Item numbers 1 through 6 of these areas of controversy are addressed in detail within Chapter 4 (Section 4.2.6.2) of the FED. An update on Item number 2 is provided in Section 3.6 of this FSED. Item numbers 7 through 11 were identified during three public scoping meetings held on February

25, 2005 in Sausalito, and April 12, 2005 in Sausalito and Bodega Bay and during the Director's Herring Advisory Committee Meeting held on April 5, 2005 in Sausalito; further details of items 7 through 11 are presented in Section 3.6 of this FSED:

1. Potential interactions between marine mammals and commercial fishing activities;
2. Importance of herring as a forage species for sea birds, marine mammals, and other fishes;
3. Inadequate knowledge of the resource;
4. Errors in stock assessment;
5. Insufficient management resources;
6. Potential impact of unforeseen events or catastrophes (e.g., oil spills, chemical spills);
7. Status of the herring population in San Francisco Bay;
8. The independent Peer Review the Department sought and the alleged violation of the Marine Life Management Act;
9. Use of spawn survey alone for biomass estimation;
10. Minimum mesh size reduction in San Francisco Bay to 2-in.; and
11. Comparison of Tomales Bay and San Francisco Bay Age Structure.

S.7 Issues to be Resolved

At issue is whether or not to provide for commercial fishing as an element of herring management in California. If commercial herring fishing is authorized, decisions are needed to specify the areas, seasons, fishing quotas and other appropriate special conditions under which fishing operations may be conducted. As discussed, one aspect of managing this and other fishery resources is the understanding that a no project alternative is considered a management tool. This document, the 1998 FED, the 1999 FSED, the 2000 FSED, the 2001 FSED, the 2002 FSED, and the 2004 FSED include a review and discussion of the proposed project as well as alternatives.